

REMARKS

By the present amendment, Applicants have cancelled Claims 1-20 and added Claims 21-36. Claims 21-36 remain pending in the present application. Claims 21 and 28 are independent claims.

Applicants appreciate the courtesies extended to their representative during the personal interview held April 18, 2006. The present response summarizes the substance of the interview. At the interview proposed new Claims 21-22 were presented. Proposed Claim 21 set forth a housing having a groove, a transparent front panel slidable in the groove, a plurality of alphanumeric LED displays, a driver circuit for the alphanumeric displays with switches for changing the characters, a plurality of LED diode arrays mounted in the groove below the front panel for backlighting the panel, and a diode array driver circuit for automatically changing the color of the backlighting when the characters on the alphanumeric displays are changed. Proposed Claim 22 provided for a housing, a transparent panel mounted in the housing, means for programmably displaying alphanumeric gaming limits on the panel, means for radiating a backlight through at least a portion of the panel, and means for automatically changing the color of the backlight when the gaming limits are changed. Applicants also presented a proposed drawing change to correct a duplicate reference number 52 in the specification. Arguments were advanced that the rejection of Claim 15 was not justified by the references of record, which do not show a diode array, and that while the references show an alphanumeric LED display and an LED backlight, the references do not show the two in combination with the added limitation that the color of the backlight changes whenever the alphanumeric characters change.. The Examiner

indicated that the amendment appeared to overcome the references of record; however, the limitation that the backlight color changes whenever the gaming limits change was not in the original claims, and would therefore require further search.

By the present amendment, Applicants have submitted a proposed drawing change to Figs. 1 and 2. The drawing revisions change reference number “50” to --50a--, reference number “52” to --50b--, and reference number “22” to reference number -21--. The drawing change is proposed to correct duplicate reference numbers, in that the original application used the reference number 52 to refer to both the logo on the front panel and one of the LED diode arrays mounted in the housing groove, and reference number 22 is used to refer to both the table upon which the sign is placed in Fig. 1 and the groove in the housing. The drawing change would change reference number 50 (referring to text engraved in the front panel) to 50a, add new reference number 50b to refer to graphics or a logo engraved in the panel, and leave reference number 52 unchanged (referring to one of the diode arrays). The drawing change would also add new reference number 21 to refer to the table on which the sign is placed in Figure 1, and leave reference number 22 to refer to the groove in the housing.

Corresponding revisions to the specification have been made by the present amendment, particularly to the two full paragraphs on page 7 of the specification, to the second full paragraph on page 8 of the specification, and the first full paragraph on page 9 of the specification. The amendments change all appearances of the reference number 50 to 50a, all appearances of the reference number 52 to 50b, and all appearances of the reference number 22 to 21. Applicants

request that the proposed drawing change and amendments to the specification be entered to correct the duplicate reference numbers.

In the recent Office Action the Examiner rejected Claims 4, 9 and 18 under 35 U.S.C. § 112, second paragraph, as being indefinite. Claims 1, 4, 5, and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown (U.S. Patent No. 4,751,506) in view of Schoniger (U.S. Patent No. 5,678,334). Claims 2, 3, 7-13, and 15-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Schoniger and further in view of Day (Great Britain Patent No. 2,139,796). Claim 14 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Brown in view of Schoniger and Day and further in view of Nielson (U.S. Patent Publication No. 2004/0166966).

The cancellation of Claims 1-20 by the present amendment should serve to render the prior art grounds of rejection moot. New Claims 21-36 have been introduced to more particularly define Applicants' unique construction in view of the prior art of record. Reconsideration of the claims in light of the amendments and for the following reasons is respectfully requested.

By the present amendment, Applicants have cancelled Claims 1-20 in favor of new Claims 21-36. New Claim 21 is substantially similar to previous Claim 1, with Claim 15 incorporated therein, the 35 §112 2nd paragraph problems cleaned up, and the addition of a circuit limitation causing the backlight color to change whenever at least the minimum gaming limit is changed. The latter limitation is supported by the specification on pages 12 and 13 (the second full paragraph on page 13 indicates the color change in the backlight is not required when

the maximum limit changes, although such a variation would be within the scope of the invention as claimed). No new matter has been added by new claim 21.

New Claims 22-23 claim the indicia formed on the panel, and are supported by page 12, lines 14-16 and Figs. 1 and 2 of the application. New Claim 24 claims the location of the switches, and is supported at page 9, lines 20-23 and Fig. 4 of the application. New Claim 25 claims a microcomputer chip, decoder and driver as part of the circuit controlling the alphanumeric displays, and is supported at page 11, lines 11-14 and Fig. 5 of the application. New Claim 26 claims transistors as part of the driver circuit for the diode arrays to change the color of the backlighting when the switches change the alphanumeric displays, and is supported at page 12, lines 1-7 and 20-21, and by Fig. 5 of the application. New Claim 27 claims the duplicate alphanumeric displays on the back panel, and is supported at page 9, line 23 through page 10, line 9 and Fig. 4 of the application. No new matter has been added by new Claims 21-27.

New independent Claim 28 has somewhat different scope than new Claim 21, being somewhat broader by not limiting the structure of the housing or limiting the transparent panel to the front of the housing, but being narrower by invoking the provisions of 35 U.S.C. § 112, 6th ¶ to claim means for displaying the gaming limits, backlighting a portion of the panel, and automatically changing the color of the backlight when the minimum gaming limit is changed. The limitations of independent Claim 28 are supported by the same provisions of the application that support independent Claim 21.

New Claims 29 and 30 are parallel to Claims 22-23, and supported by the same provisions of the specification. New Claim 31 specifies that the means for displaying the gaming limits includes alphanumeric LED displays and a driver circuit having switches for changing the limits, and is supported at p. 9, line 6 through line 23, page 11, lines 4-14, and Fig 5 of the application. New Claim 32 is parallel to new Claim 24, and supported by the same portion of the specification. New Claim 33 is parallel to new Claim 25 and has the same support in the specification. New Claim 34 provides that the means for backlighting includes LED diode arrays, and is supported at page 12, lines 1-7, Fig. 5 of the application, and by original Claim 15, now cancelled. New Claim 35 is parallel to new Claim 26 and has the same support in the specification. New Claim 37 is parallel to new Claim 27, and has the same support in the specification. No new matter has been added by new Claims 28-37.

It will be noted from the schematic diagram in Fig. 5 that each backlight diode 52, 54, and 56 comprises three different LEDs in a single housing having four terminals. As noted in the specification at page 12, lines 5-7, each diode 52, 54, 56 has a common terminal connected to Vdd, i.e., each backlight diode has a common anode. Such diodes are well known to those skilled in the art, such as the Model NSTM515AS Full Color diode made by Nichia Corporation, which includes red, green and blue diodes in a four-terminal housing. Thus, as set forth at page 12, lines 3-5, six different colors (including red, green, blue, red-green, red-blue, and green-blue) can be produced by each backlight diode 52, 54, 56 by application of different combinations of high and low voltages to the three cathodes. The plurality of such diodes, or diode arrays,

produces uniform lighting in the transparent front panel. This is not shown in the prior art, but is fairly claimed in new independent Claims 21 and 28.

The Brown reference shows a scoreboard with alphanumeric LED displays, but does not show a backlit front panel. The Schoniger reference shows a backlit front panel, but not alphanumeric LED displays. The Day reference shows an edge lit or backlit panel having characters engraved thereon, but no alphanumeric LED displays. Nielson describes a scoreboard with alphanumeric LED displays and a backing on the front panel to hide the circuitry, but does not describe backlighting or edge lighting. Therefore, the applied references of record do not show or suggest alphanumeric LED displays in combination with a backlit front panel that changes the color of the backlight when one of the alphanumeric LED displays changes.

Of the references cited by the Examiner as being relevant to the present invention, but not applied, Redmond et al. shows an edge light for a lighting panel, but no alphanumeric LED displays; Guest shows a sign with opaque lettering and a reflective back plate illuminated by LEDs, but does not show alphanumeric displays; Lee shows a sign with an LED light source, but no alphanumeric LED displays; Tsoukalas describes an electronic scoreboard display for billiards that appears to use an LCD display, rather than LEDs, and no backlighting; Dettrey et al. describe a casino game limit system that appears to use either cathode ray tube or LCD screens to display messages, LEDs only being used as status indicators, no backlit front panel being shown; and Males shows a sign using an array of discrete LEDs as a light source, no alphanumeric LED displays or backlighting being shown. Thus, none of the applied or cited art of record shows or suggests, either singly or in combination, a sign having a backlit panel with

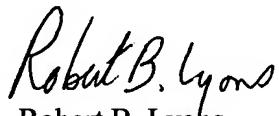
Appl. Serial No. 10/609,404
Art Unit: 3713

Attorney Docket No. 21089.00
Confirmation No. 9426

alphanumeric LED displays in which the color of the backlight automatically changes when the character shown on one of the alphanumeric LED displays is changed.

For the foregoing reasons, Applicant respectfully submits that the present application is in condition for allowance. If such is not the case, the Examiner is requested to kindly contact the undersigned in an effort to satisfactorily conclude the prosecution of this application.

Respectfully submitted,


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RBL:dht
Attachments: Replacement Sheets (2)
Annotated Sheets Showing Changes (2)

*Appl. Serial No. 10/609,404
Art Unit: 3713*

*Attorney Docket No. 21089.00
Confirmation No. 9426*

Amendments to the Drawings:

A proposed drawing change is submitted herewith. Proposed changes are shown in red. The attached sheets of drawings include changes to Figs. 1 and 2. These sheets, which include Figs. 1-2, replace the original sheets including Figs. 1-2. In Figs. 1 and 2, reference number "50" has been changed to reference number --50a--, and reference number "52" has been changed to reference number --50b--. In addition, in Fig. 1, reference number "22" has been changed to – 21--,

Attachments: Replacement Sheets (2)

 Annotated Sheets Showing Changes (2)

Application No.: 10/609,404
Art Unit: 3713
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ANNOTATED SHEET SHOWING CHANGES

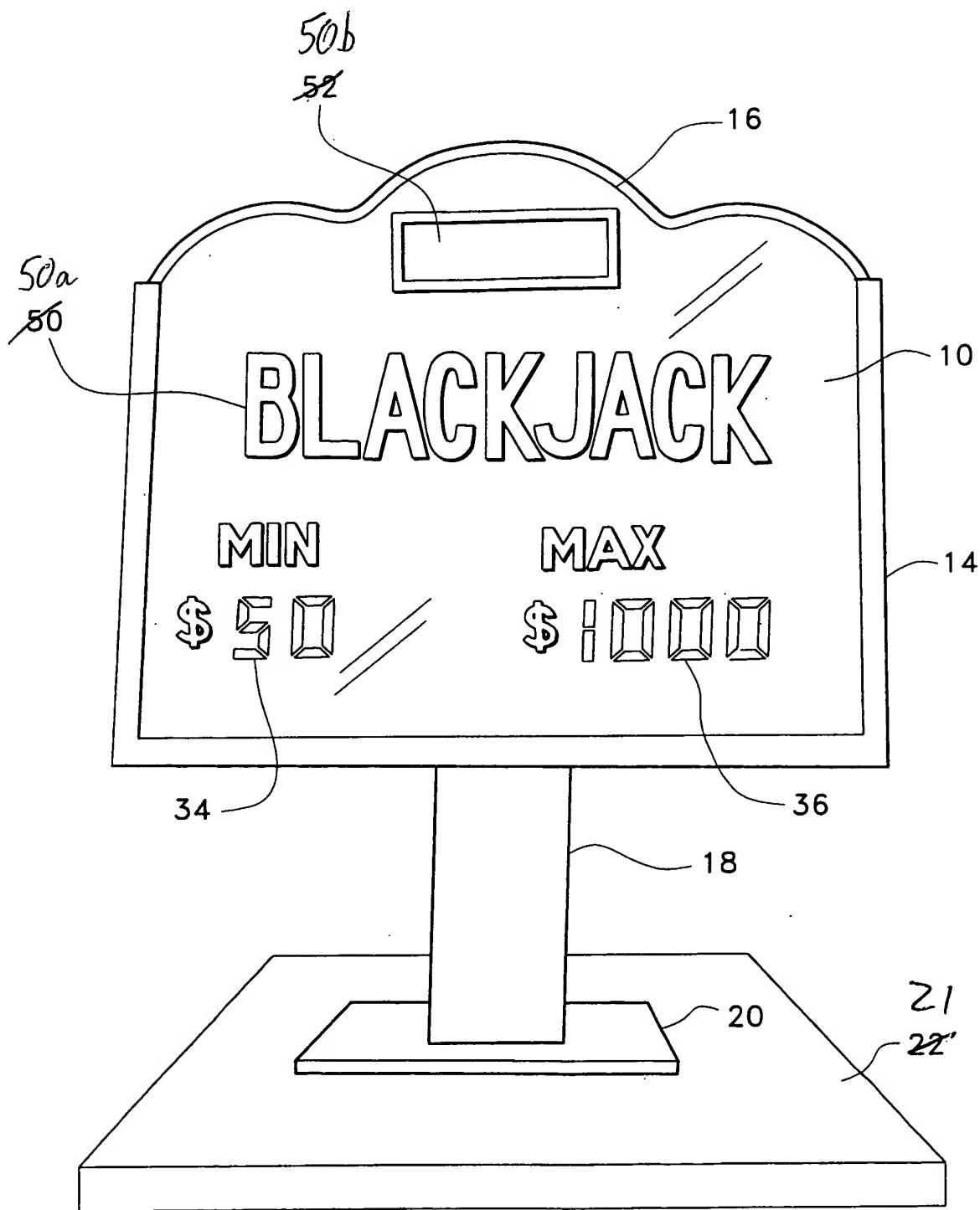


Fig. 1

Application No.: 10/609,404

Art Unit: 3713

Attorney Docket No. 21089.00

ANNOTATED SHEET SHOWING CHANGES

50b

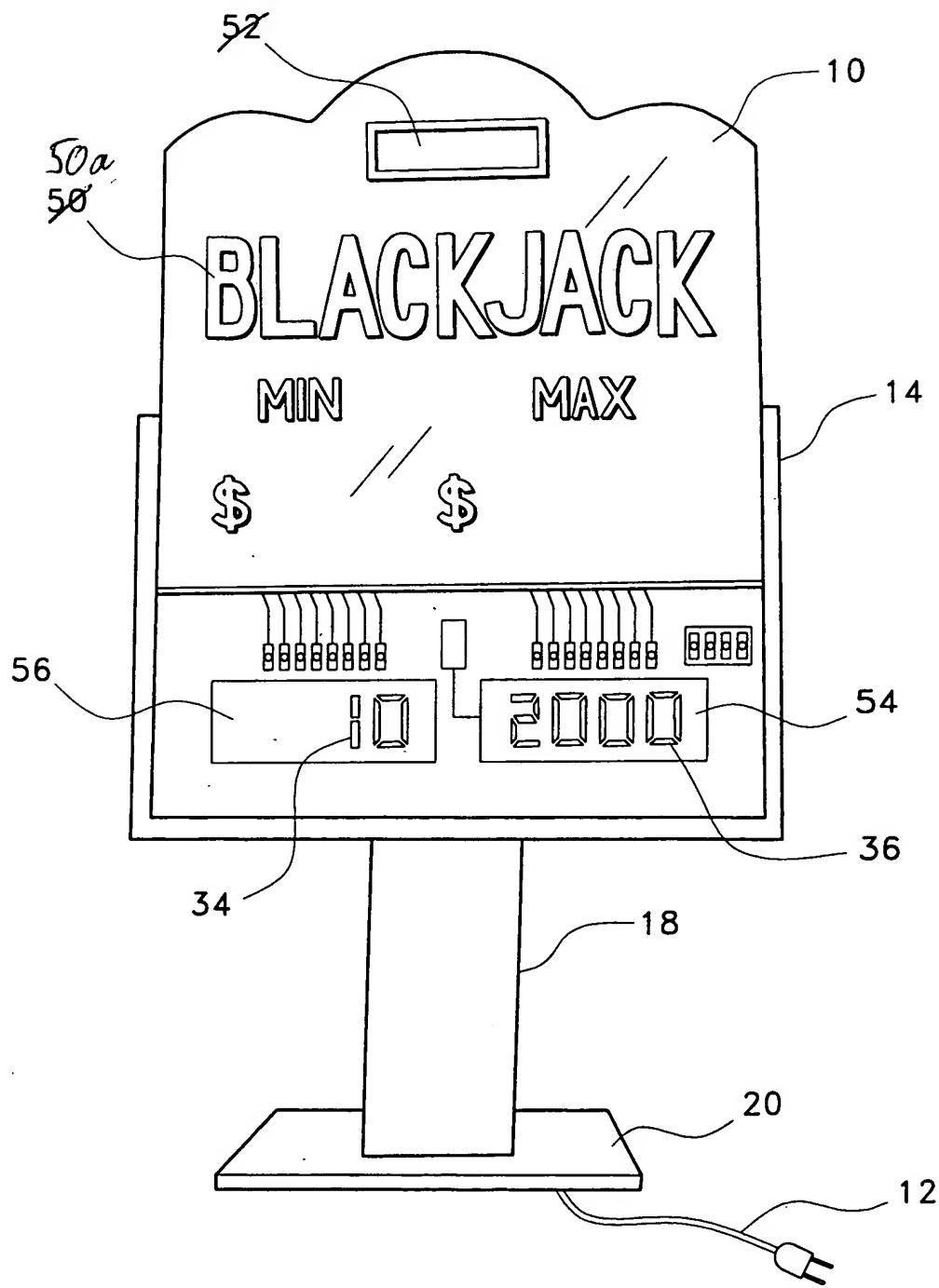


Fig. 2